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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/625,863

Applicant(s)

PHILLIPS ET AL.

Examiner

ROBERT C. SCHEIBEL

Art Unit

2419

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 17-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 17-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 3/11/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Examiner acknowledges receipt of Applicant's Request for Continued Examination (RCE) filed 3/4/2009.
- Claims 1, 7, 10, 12, 14, and 17 are currently amended.
- Claims 1-12, 14, 17-20, and 23-25 are currently pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/5/2009 has been entered.

Response to Arguments

1. Applicant's arguments, see pages 8-14, filed 2/5/2009, with respect to the rejection of claims 1-12, 14, 17-20, and 23-25 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

On page 14, Applicant summarizes the claim amendments as well as the previous rejections of these claims. In the paragraph starting at the end of page 8, Applicant cites some case law relevant to 35 U.S.C. 103(a).

On page 9, Applicant asserts that the limitation “a demarcation device coupled to the first, second, and third communication channels” of claim 1 is missing from the rejection. Applicant argues that the combination of Mukerjee and Wengrovitz discloses a first device coupled to two channels and a second device coupled to a third channel rather than a single device coupled to all three channels. Examiner respectfully disagrees. The combination of network interface 160 of Mukerjee and the SIP adapter module of Wengrovitz is interpreted as a single device. As the component of Wengrovitz is merely an “adapter module”, the connection of this module to another device merely modifies the device (by attaching an interface adapter) and need not be considered a separate device. Wengrovitz indicates in a number of places that the functionality of the adapter module is transparent to the users on the PSTN as well as the SIP user agent (see paragraph 0058, for example (“...in a manner that is transparent to PSTN 185 and SIP user agent 165”). As such, Examiner believes that the network interface of Mukerjee, as modified by Wengrovitz, discloses the limitations of a single device coupled to three communication channels as required by the claims.

On page 10, Applicant asserts that the limitation “the demarcation device interposed between the third communication channel and the wired phones, and wherein the demarcation device is interposed between the Internet and the one or more SIP phones” is missing from the rejection. Applicant asserts that because the SIP agent and the IP network or Internet are in direct communication, Wengrovitz does not disclose this limitation. However, Wengrovitz also discloses that the telephone 145 “may also be an analog, IP and/or a software phone and the like” (see paragraph 0033) and further indicates that “IP may be SIP signaling plus Real-Time Transport Protocol (RTP)” (see paragraph 0037). In this embodiment, Wengrovitz discloses the

limitation that the demarcation device is interposed between the Internet (IP network 150 – described as “a wide area network” and contrasted with a private network in paragraph 0028) and one or more SIP phones (such as telephone 145 which as described above may be an IP phone which would use SIP signaling and is thus a SIP phone).

On page 10, Applicant asserts that the limitation “the demarcation device determines if the first, second, and third communication channels should be simultaneously sent the incoming phone call directed to the telephone number” is missing from the rejection. Applicant asserts that since Mukerjee only discloses sending the call simultaneously to two phones, that this limitation is not disclosed in the combination of Mukerjee and Wengrovitz. However, the purpose of Mukerjee is to concurrently ring all the devices at which a particular person may be reached (rather than one at a time). In the combination of Mukerjee and Wengrovitz, it is likely that a particular user may be contacted on a wired (PSTN), wireless, or SIP phone. It would therefore have been obvious to ring all three of these phones simultaneously in this combination.

On pages 11-12, Applicant presents arguments related to the motivation to combine the Mukerjee and Wengrovitz references. On page 11, Applicant raises the question of whether the combination of Mukerjee and Wengrovitz results in one or two devices disclosing the functionality of the demarcation device. As indicated above, the SIP adapter module of Wengrovitz is an “adapter module” and connecting/integrating this adapter module with the network interface of Mukerjee results in a single device (modified by attaching an interface adapter).

Applicant further argues that the motivation for adding SIP to the system without modifying the legacy system is not consistent with certain portions of Wengrovitz. Examiner

respectfully disagrees. Clearly, the addition of the adapter to modify one or more interfaces of the PBX to support SIP is required for this combination. However, the user of such a system does not need to completely replace the legacy system (phones, wiring, etc.) to add SIP support. All of these legacy components of the system will still work; the system is improved by providing support for SIP devices (with minimal change).

Applicant then argues that the other independent claims as well as the dependent claims are allowable for the same reasons. Examiner respectfully disagrees for the reasons stated above.

Applicant is again silent with respect to the rejections of the claims under 35 U.S.C. 103(a) using U.S. Patent 7,162,020 to Forte as the primary reference. As such, this rejection is maintained herein.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 4, 6, 8-11, 17-20, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0160780 to Mukerjee et al in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al.

Regarding claim 1, Mukerjee discloses a telephonic communication system for integrating wireless phone service with home phone service, the telephonic communication system disposed at a user facility (the telephonic communication system comprised of at least device 160 of Figure 6 is disposed at a user facility ("private premises")), the telephonic communication system comprising:

a first communication channel to a wireless phone (the wireless channel to phone 175 of Figures 2 and 5, for example), wherein incoming phone calls are directed to the wireless phone with a telephone number (incoming calls are clearly routed to the wireless phone as indicated throughout Mukerjee; see the abstract for example);

a second communication channel to an interface coupled to one or more wired phones at a user location (wired phone 150 of Figure 2, for example; the channel is the connection between wired phone 120 and the network interface element 160 of Figure 6), wherein the first and second communication channels are accessible with a telephone number (see paragraphs 43 and 44 which indicates that both channels can be accessed using the subscribers published number which can be either the wired or wireless phone number); and

a demarcation device (the network interface device 160) coupled to the first and second communication channels (this coupling is clearly shown in Figure 2, for example)

and interposed between the first communication channel and second communication channel (device 160 is interposed between the first and second channels as indicated in Figure 2)

the demarcation device disposed at a user facility (device 160 of Figure 6 is disposed at a user facility ("private premises")),

the demarcation device interposed between the first and second communication channels (as shown throughout and specifically in Figure 6, the demarcation device (network interface 160) is interposed between the first and second interfaces),

the demarcation device interposed between the first communication channel and the one or more wired phones at the user location (device 160 is also clearly interposed between the first channel (to wired phone 120, for example) and the one or more wired phones (150) as also indicated in Figure 6),

the demarcation device interposed between the second communication channel and the wired phones (device 160 is also clearly interposed between the second channel (to the wireless channel shown adjacent to the antenna of device 160, for example) and the one or more wired phones (150) as also indicated in Figure 6),

wherein the demarcation device receives an incoming phone call on the first communication channel directed to the telephone number for the wireless phone (see paragraph 44 on page 3 which describes an incoming call directed to the number of the mobile station (as indicated in paragraph 47, it is clear that mobile stations 170 and 175 are functionally interchangeable, but shown in different locations in the Figure), the demarcation device

determines if the first and second communication channels should be simultaneously sent the incoming phone call directed to the telephone number (see paragraphs 43-45 on page 3; "...after determining that the dialed MIN corresponds to a subscriber of the services...network interface 160...instructs mobile station 175 to ring...network interface offers/routes the call to switch 140 to ring wired station 150...wired station 150 and mobile station 175 ring concurrently...").

Similarly, Regarding claim **10**, Mukerjee discloses a method for integrating wireless phone service with home phone service at a user facility, the method comprising steps of:

routing an incoming phone call to a wireless phone (phone 175 of Figure 2, for example), the incoming phone call is directed to the wireless phone with a telephone number (see paragraph 45 on page 3 which indicates that the call is routed to the wireless phone via the wireless phone's number);

receiving the incoming phone call at a demarcation device having a wireless interface (the network interface device 160), the demarcation device disposed at a user facility (device 160 of Figure 6 is disposed at a user facility ("private premises")), the demarcation device coupled to one or more wired phones at a user location (the phone 150 in Figure 2 at user location), the demarcation device interposed between a PSTN and the one or more wired phones at the user location (the demarcation device (network interface device 160) is interposed between the PSTN and the wired phone 150 as indicated in Figures 2, 6, and paragraph 47 on page 3; Figure 2 indicates a connection to the PSTN (via the top output of interface switch 161); however, in Figure 2, it is not clear if PBX 140 is part of the PSTN or the user's location; Figure 6 and paragraph 47 clearly indicate that in an embodiment, the PBX 140 may be a "private domain

PBX” and that a call from the PSTN (via originating station 120) terminates at the network interface element 160; clearly in this embodiment, device 160 is interposed between the PSTN and the wired phones 150);

routing the incoming phone call to an interface coupled to one or more phones at a user location, wherein the wireless phone and the one or more phones at the user location are accessible with a telephone number (as indicated in paragraphs 43-45 of page 3, incoming calls are routed concurrently to a wireless interface coupled to wireless phone 175 as well as to the one or more wired phone 150 at the user location; further, the wireless interface is coupled to the wired phones via interface switch 161 in Figure 2);

determining if the wireless phone should be sent an incoming phone call (see paragraph 43 on page 3 which describes the network interface 160 “determining if the dialed number corresponds to a subscriber of the services” and then concurrently rings the mobile station and the wired phone); and

determining if the incoming phone call should be routed to one or more wired phones (again, see paragraphs 43-45 which all indicate the network interface 160 determining if the number is for a subscriber to the services and then routes the call accordingly to the wired phone if appropriate); and

routing the incoming phone call to one or more of the wired phones (see the last 2 sentences of paragraph 43 on page 3, for example).

Similarly, regarding claim 17, Mukerjee discloses a method performed in a telephone switch for integrating wireless phone service with home phone service, (the method of Mukerjee

is implemented using controller 165 of Figure 2 which as indicated in paragraph 28 on page 2 is programmed to determine how to route the calls; clearly, this indicates a computer readable medium into which the instructions are “programmed”) the method comprising steps of:

routing an incoming phone call to a wireless phone (phone 175 of Figure 2, for example), the incoming phone call is directed to the wireless phone with a telephone number (see paragraph 45 on page 3 which indicates that the call is routed to the wireless phone via the wireless phone’s number);

routing the incoming phone call to a demarcation device having a wireless interface (the network interface device 160), the demarcation device disposed at a user facility (device 160 of Figure 6 is disposed at a user facility (“private premises”)), the demarcation device coupled to one or more wired phones at a user location (the phone 150 in Figure 2 at user location), the demarcation device interposed between the one or more wired phones and a phone call transport network (see Figure 2; clearly, the network interface device 160 is interposed between the wired phone 150 and the phone call transport network 130), wherein:

the wireless phone and the one or more wired phones are accessible with a telephone number (see paragraphs 43-45 on page 3 which indicate that the phones are accessible with a number), and

the first and second-listed routing steps are performed, at least partially, simultaneously (as indicated throughout, the two routing steps occur concurrently or simultaneously; see paragraphs 43-45 on page 3, for example);

determining if the wireless phone should be sent the incoming phone call (see paragraph 43 on page 3 which describes the network interface 160 “determining if the dialed number

corresponds to a subscriber of the services” and then concurrently rings the mobile station and the wired phone); and

determining if the one or more wired phones should be sent the incoming phone call (again, see paragraphs 43-45 which all indicate the network interface 160 determining if the number is for a subscriber to the services and then routes the call accordingly to the wired phone if appropriate).

Mukerjee does not disclose expressly the missing limitations of claim 1 regarding the third communication channel or the limitations regarding the demarcation device being interposed between an Internet and the one or more wired phones of claims 10 and 17. Specifically, Mukerjee does not disclose expressly the limitations of a third communication channel coupled to an Internet and coupled to one or more SIP phones; the demarcation device coupled to the third communication channel; the demarcation device interposed between the third communication channel; the demarcation device interposed between the third communication channel and the wired phones; and the third communication channel also simultaneously sent the incoming phone call.

However, Wengrovitz discloses the addition of a SIP adapter to a system such as a PBX to enable an inexpensive way to allow a legacy PBX or similar device to support SIP devices. Mukerjee and Wengrovitz are analogous art because they are from the same field of endeavor of voice communications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to similarly modify the network interface 160 of Mukerjee to add a SIP adapter module

(SAM 130 of Figure 4A, for example) and thus provide a third channel coupled to an Internet (IP network 150 of Figure 4A, for example) and to one or more SIP phones (SIP user agent 165 of Figure 4A, for example; see paragraph 0033 on page 3 which indicates that the SIP user interface is a SIP enabled telephone; another SIP phone in Wengrovitz is an embodiment of the telephone 145; as indicated in paragraph 0033, “telephone 145...may also be an...IP and/or software phone” and in paragraph 0037 “...the IP may be SIP signaling...”). Mukerjee, modified thus by Wengrovitz, also discloses the other missing limitations above. Specifically, the above combination of Mukerjee and Wengrovitz discloses the demarcation device coupled to the third communication channel (the demarcation device now includes the SIP adapter module which is clearly coupled to the third communication channel (including the IP network 150) as shown in Figure 4A); the demarcation device interposed between the third communication channel (similarly, the demarcation device (network interface 160 of Mukerjee modified with the SIP adapter module of Wengrovitz) is interpose between the first, second and third communication channels (the third channel including IP network 150 is simply another interface from the network interface)); the demarcation device interposed between the third communication channel and the wired phones (telephone 175 in Figure 4A is an analogous wired phone and it would thus be obvious to interpose the demarcation device in the above combination between the third communication channel and the wired phones); and wherein the demarcation device is interposed between the Internet and the one or more SIP phones (the demarcation device (modified network interface) is interposed between the SIP phone 145 (in the embodiment described above) and the Internet (IP network 150 – described as a wide area network in paragraph 0028, for example)); and the third communication channel also simultaneously sent the incoming phone call (it would

similarly have been obvious to include the SIP phones as potential phones to which the incoming calls are simultaneously sent).

The motivation for doing so would have been to integrate the SIP network and the SIP phones with the network interface system of Mukerjee with minimal changes to the legacy system or phones (and thus providing an inexpensive upgrade) as suggested by Wengrovitz in paragraphs 0005 and 0006 on page 1 ("the present invention is particularly advantageous in that existing legacy PBX switches and telephone sets can be fully integrated with the SIP network with no changes to the PBX or telephone set"). Therefore, it would have been obvious to combine Wengrovitz with Mukerjee for the benefit of integrating the SIP network and the legacy system with minimal change to the legacy system to obtain the invention as specified in claims 1, 10, and 17.

Regarding claim 3, Mukerjee discloses the limitation that the interface is located at the user location in Figure 2 and in paragraph 47 on page 3 ("...or a private domain PBX").

Regarding claim 4, Mukerjee discloses the limitation that the demarcation device provisionally sends the incoming phone call to the first and second communication channel until acceptance of the incoming phone call when one of the first and second communication channels receives the incoming phone call and the other of the first and second communication channel is disconnected from the incoming phone call (see the last sentence of paragraphs 43-45 as well as paragraph 61 which indicate that the incoming call is sent to both channels concurrently until one of them answers (paragraphs 43-45) and when one of them answers, the other is disconnected (paragraph 61)).

Regarding claim **6**, Mukerjee discloses the limitation that the interface is one of a wireless cellular interface, a PSTN interface and a VOIP interface in that the switch 140 is a PSTN like interface (although it resides in the user location).

Regarding claim **8**, Mukerjee discloses the limitation that the first communication channel uses different physical transport within the user location from the second communication channel (see Figure 2 which indicates that the two interfaces use different physical transport (wired to phone 150 and wireless to phone 175)).

Regarding claim **9**, Mukerjee discloses the limitation that the one or more wired phones are chosen from the group consisting of a POTS phone, a cordless phone, a WIFI, SIP phone, and a wired SIP phone in that the wired phone 150 is a POTS phone.

Regarding claim **11**, Mukerjee discloses the limitation that the first and second-listed routing steps are performed, at least partially, simultaneously (see the last line of paragraph 43 on page 3, for example).

Regarding claim **18**, Mukerjee discloses the limitation that the demarcation device interface wirelessly couples the one or more wired phones to the phone call transport network (see Figure 2 which shows the wireless coupling from the network interface device 160 to phone 175 which couples the wired phone wirelessly to the call transport network).

Regarding claim **19**, Mukerjee discloses the limitation that the first-listed determining step comprises a step of detecting if the one or more wired phones have been answered (see paragraph 62 on pages 4-5 which indicates that if the wired phone answers first, the leg of the call to the mobile phone 170 or 175 is released).

Regarding claim **20**, Mukerjee discloses the limitation that the second-listed determining step comprises a step of detecting if the wireless phone has been answered (see paragraph 61 on page 4 which indicates that if the wireless phone 170 or 175 answers the call first, the wired leg is released).

Regarding claim **23**, Mukerjee discloses the limitation that if the one or more wired phones have been answered, stopping the routing of the incoming phone call to the wireless phone (see paragraph 62 on pages 4-5 which indicates that if the wired phone answers first, the leg of the call to the mobile phone 170 or 175 is released).

Regarding claim **24**, Mukerjee discloses the limitation that if the wireless phone has been answered, stopping the routing of the incoming phone call to the one or more wired phones (see paragraph 61 on page 4 which indicates that if the wireless phone 170 or 175 answers the call first, the wired leg is released).

4. Claims **12, 14, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0160780 to Mukerjee et al in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al and in further view of U.S. 6,816,582 to Levine et al.

Regarding claim **12**, Mukerjee, as modified above, discloses all limitations of parent claim 10 as indicated in the rejection above. Mukerjee further discloses the limitations of claim 12 of the first-listed determining step comprises a step of further comprising:

detecting if the one or more wired phones have been answered (see paragraph 62 on pages 4-5);

if the one or more wired phones have been answered, terminating the incoming phone call to the wireless phone (see paragraph 62 on pages 4-5);

if the one or more wired phones have not been answered, detecting if the wireless phone has been answered (see paragraph 61 on page 4);

if the wireless phone has been answered, terminating the incoming phone call to the one or more wired phones (see paragraph 61 on page 4).

Similarly, regarding claims **14 and 25**, Mukerjee, as modified above, discloses all limitations of parent claims 10 and 17, respectively, as indicated in the rejection above.

Mukerjee also alludes to the use of a voicemail system in paragraph 38.

However, Mukerjee does not disclose expressly the limitation of claim 12 that if the one or more wired phones have not been answered and if the wireless phone have not been answered, sending the incoming phone call to a voice mail system or the similar limitations of claims 14 and 25. This is well known in the art. Consider Levine, for example which discloses the missing limitations of claims 12, 14, and 25 in lines 30-43 of column 8. Mukerjee and Levine are analogous art because they are from the same field of endeavor of voice communications for contacting a user via multiple devices. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Mukerjee, as modified above, to use a global voicemail system after a certain number of rings as taught by Levine. The motivation for doing so would have been to avoid continual ringing as suggested by Levine in lines 30-43 of column

8. Therefore, it would have been obvious to combine Levine with Mukerjee, as modified above, for the benefit of avoiding continual ringing to obtain the invention as specified in claims 12, 14, and 25.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0160780 to Mukerjee et al in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al and in further view of U.S. Patent 7,162,020 to Forte.

Regarding claim 2, Mukerjee, as modified above, discloses all limitations of parent claim 1 as indicated in the rejection above. Mukerjee also discloses wireless cellular networks throughout. However, Mukerjee does not disclose expressly the limitation that the wireless phone and the wireless interface uses one of GSM, CDMA, AMPS, and TDMA transport. These technologies are well known in the art as common cellular interfaces/networks. Consider Forte, for example, which discloses this limitation in lines 22-25 of column 5. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Mukerjee to use one of the above wireless interfaces explicitly. The motivation for doing so would have been to provide the service to a wider number of potential subscribers by explicitly supporting these interfaces to existing phones. Therefore, it would have been obvious to modify Mukerjee, as modified above, as suggested by Forte for the benefit of supporting a wider range of potential customers to obtain the invention as specified in claim 2.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0160780 to Mukerjee et al in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al and in further view of U.S. Patent 2004/0170268 to Hakusui.

Regarding claim 5, Mukerjee, as modified above, discloses all limitations of parent claim 1 as discussed above in the rejection under 35 U.S.C. 102(e). Mukerjee does not disclose expressly the limitations of claim 5 that the second communication channel can join the incoming phone call of the first communication channel, and the phone call can be manually transferred from the second communication channel to the first communication channel. However, it is well known that call transfer and conferencing are features of PBX systems. For example, Hakusui discloses this in paragraph 3 on page 1. Mukerjee and Hakusui are analogous art because they are from the same field of endeavor of communication systems and similarly deal with simultaneously alerting multiple devices based on a single telephone number. At the time of the invention it would have been obvious to a person of ordinary skill in the art to *explicitly* include call transfer and conferencing in the features provided in the PBX of Mukerjee and thus extended to the remote device to disclose the limitations of claim 5. The motivation for doing so would have been to add the flexibility generally provided in PBX systems to the system of Mukerjee. Therefore, it would have been obvious to combine Hakusui with Mukerjee, as modified above, for the benefit of providing PBX features to obtain the invention as specified in claim 5.

Regarding claim 7, Mukerjee, as modified above, discloses the limitations of parent claim 6 as indicated in the rejection above. However, Mukerjee does not disclose expressly the limitations of claim 7 that the VOIP interface is one of a wireless Internet interface, a WIFI interface, a power line Internet interface, an ultra-wide band wireless interface, a microwave internet interface, a cable modem interface, and a direct broadcast satellite Internet interface.

Hakusui discloses a PBX like system which has a VOIP interface which is a cable modem interface. (The VOIP interface is the network interface 420 of Figure 2 and the limitation of the cable modem interface is indicated in paragraph 73 on page 5.) Mukerjee and Hakusui are analogous art because they are from the same field of endeavor of communication systems and similarly deal with simultaneously alerting multiple devices based on a single telephone number. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a VOIP interface to the network interface device of Mukerjee. The motivation for doing so would have been to provide access to VOIP service for customers to minimize or eliminate long distance phone charges as suggested in paragraph 4 on page 1 of Hakusui. Therefore, it would have been obvious to combine Hakusui with Mukerjee, as modified above, for the benefit of minimizing long distance charges to obtain the invention as specified in claim 7.

7. Claims **1-4, 8-12, 14, 17-21, and 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,162,020 to Forte in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al and in further view of U.S. Patent 6,816,582 to Levine et al.

Regarding claim 1, Forte discloses a telephonic communication system for integrating wireless phone service with home phone service, the telephonic communication system disposed at a user facility (the Wireless Connect 30 below is disposed at a user PBX as indicated in Figures 1 and 3 and the associated descriptions), the telephonic communication system comprising:

- a first communication channel to a wireless phone (the link from the Wireless Connect 30 to the cellular phone 70 of Figures 1 and 3), wherein incoming phone calls are directed to the wireless phone with a telephone number (the cellular telephone 70 of figure 1, for example);

- a second communication channel to an interface coupled to one or more wired phones at a user location (link 32 of Figures 1 and 3, for example);

- a demarcation device (the combination of the PBX 14 and Wireless Connect 30 of Figures 1 and 3; as indicated in lines 37-47 of column 12, these can be combined into one device) coupled to the first and second communication channels

- the demarcation device disposed at a user facility (the Wireless Connect 30 below is disposed at a user PBX as indicated in Figures 1 and 3 and the associated descriptions),

- the demarcation device interposed between the first and second communication channels (see figure 1, which shows the demarcation device (elements 14 and 30, combined) between the two channels and the first channel (to the cellular phone)),

- the demarcation device interposed between the first communication channel and the one or more wired phones at the user location (see figure 1, which shows the demarcation device (elements 14 and 30, combined) between the first channel (to the cellular phone) and the wired phones 12a and 12b),

the demarcation device interposed between the second communication channel and the one or more wired phones at the user location (see figure 1, which shows the demarcation device (elements 14 and 30, combined) between the second channel (link 32) and the wired phones 12a and 12b),

wherein the demarcation device receives an incoming phone call on a communication channel, the demarcation device determines if the other communication channel should be simultaneously sent the incoming phone call directed to the telephone number (see lines 46-49 of column 13).

Similarly, regarding claim **10**, Forte discloses a method for integrating wireless phone service with home phone service at a user facility, the method comprising steps of:

routing an incoming phone call to a phone, the incoming phone call is directed to the phone with a telephone number (see lines 56-63 of column 6 which indicate the call directed to the wired device (12a) is directed to at least that phone);

receiving the incoming phone call at a demarcation device having a wireless interface, the demarcation device disposed at a user facility (the Wireless Connect 30 below is disposed at a user PBX as indicated in Figures 1 and 3 and the associated descriptions), the demarcation device coupled to one or more wired phones at a user location, (the WC/PBX is the demarcation device and the incoming call is received there as described in lines 56-63 of column 6, for example), the demarcation device interposed between a PSTN and the one or more wired phones at the user location (see Figure 1 which shows the demarcation device (elements 14 and 30, combined) interposed between the PSTN 16 and the wired phones 12a and 12b);

determining if the incoming phone call should be routed to the one or more other phones (this is described throughout the document; consider the passage from line 67 of column 2 through line 3 of column 3 and lines 56-63 of column 6, for example); and

routing the incoming phone call to one or more of the other phones (this is described throughout the document; consider the passage from line 67 of column 2 through line 3 of column 3 and lines 56-63 of column 6, for example).

Similarly, regarding claim 17, Forte discloses a computer readable medium having stored thereon computer executable instructions for executing a computer implemented method (the passage from line 66 of column 5 through line 10 of column 6 clearly suggests that this can be implemented using software), the computer implemented method for integrating wireless phone service with home phone service, the method comprising steps of:

routing the incoming phone call to a phone, the incoming phone call is directed to the phone with a telephone number (see lines 56-63 of column 6 which indicate the call directed to the wired device (12a) is directed to at least that phone);

routing the incoming phone call to a demarcation device having a wireless interface, the demarcation device disposed at a user facility (the Wireless Connect 30 below is disposed at a user PBX as indicated in Figures 1 and 3 and the associated descriptions), the demarcation device coupled to one or more wired phones at a user location (the WC/PBX is the demarcation device and the incoming call is received there as described in lines 56-63 of column 6, for example), the demarcation device interposed between the one or more wired phones and a phone

cal transport network (see Figure 1 which shows the demarcation device (elements 14 and 30, combined) interposed between the PSTN 16 and the wired phones 12a and 12b), wherein:

the first and second-listed routing steps are performed, at least partially, simultaneously (see lines 46-49 of column 13, for example);

determining if the phone should be sent the incoming phone call (this is described throughout the document; consider the passage from line 67 of column 2 through line 3 of column 3 and lines 56-63 of column 6, for example); and

determining if the one or more other phones should be sent the incoming phone call (this is described throughout the document; consider the passage from line 67 of column 2 through line 3 of column 3 and lines 56-63 of column 6, for example).

Forte does not disclose expressly the missing limitations of claim 1 regarding the third communication channel or the limitations regarding the demarcation device being interposed between an Internet and the one or more wired phones of claims 10 and 17. Specifically, Forte does not disclose expressly the limitations of a third communication channel coupled to an Internet and coupled to one or more SIP phones; the demarcation device coupled to the third communication channel; the demarcation device interposed between the third communication channel; the demarcation device interposed between the third communication channel and the wired phones; and the third communication channel also simultaneously sent the incoming phone call.

Forte also does not disclose expressly the limitations that the incoming call is directed towards a wireless phone and that the call is routed to one or more wired phones in addition to the targeted wireless phone.

However, Wengrovitz discloses the addition of a SIP adapter to a system such as a PBX to enable an inexpensive way to allow a legacy PBX or similar device to support SIP devices. Forte and Wengrovitz are analogous art because they are from the same field of endeavor of voice communications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to similarly modify the network interface 160 of Forte to add a SIP adapter module (SAM 130 of Figure 4A, for example) and thus provide a third channel coupled to an Internet (IP network 150 of Figure 4A, for example) and to one or more SIP phones (SIP user agent 165 of Figure 4A, for example; see paragraph 0033 on page 3 which indicates that the SIP user interface is a SIP enabled telephone; another SIP phone in Wengrovitz is an embodiment of the telephone 145; as indicated in paragraph 0033, "telephone 145...may also be an...IP and/or software phone" and in paragraph 0037 "...the IP may be SIP signaling..."). Forte, modified thus by Wengrovitz, also discloses the other missing limitations above. Specifically, the above combination of Forte and Wengrovitz discloses the demarcation device coupled to the third communication channel (the demarcation device now includes the SIP adapter module which is clearly coupled to the third communication channel (including the IP network 150) as shown in Figure 4A); the demarcation device interposed between the third communication channel (similarly, the demarcation device (network interface 160 of Forte modified with the SIP adapter module of Wengrovitz) is interpose between the first, second and third communication channels

(the third channel including IP network 150 is simply another interface from the network interface)); the demarcation device interposed between the third communication channel and the wired phones (telephone 175 in Figure 4A is an analogous wired phone and it would thus be obvious to interpose the demarcation device in the above combination between the third communication channel and the wired phones); and wherein the demarcation device is interposed between the Internet and the one or more SIP phones (the demarcation device (modified network interface) is interposed between the SIP phone 145 (in the embodiment described above) and the Internet (IP network 150 – described as a wide area network in paragraph 0028, for example)); and the third communication channel also simultaneously sent the incoming phone call (it would similarly have been obvious to include the SIP phones as potential phones to which the incoming calls are simultaneously sent).

The motivation for doing so would have been to integrate the SIP network and the SIP phones with the network interface system of Forte with minimal changes to the legacy system or phones (and thus providing an inexpensive upgrade) as suggested by Wengrovitz in paragraphs 0005 and 0006 on page 1 (“the present invention is particularly advantageous in that existing legacy PBX switches and telephone sets can be fully integrated with the SIP network with no changes to the PBX or telephone set”).

Forte, as modified above, does not disclose expressly the limitations that the incoming call is directed towards a wireless phone and that the call is routed to one or more wired phones in addition to the targeted wireless phone. However, Levine discloses the limitation of an incoming call routed to a wireless phone number and then simultaneously ringing alternative wired devices throughout the document. See lines 3-5 of column 2 and lines 41-45 of column 2,

for example. Forte and Levine are analogous art because they are from the same field of endeavor of simultaneously ringing alternative phone numbers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Forte, as modified above, to allow a wireless telephone to be the target of the incoming call. The motivation for doing so would have been to allow the user more flexibility by allowing the user's wireless (cellular) telephone to be the main number. This is suggested by Levine in lines 48-65 of column 1. Therefore, it would have been obvious to combine Levine with Forte, as modified above, for the benefit of improved user flexibility to obtain the invention as specified in claims 1, 10, and 17.

Regarding claim 2, Forte discloses the limitation that the wireless phone and the wireless interface uses one of GSM, CDMA, AMPS, and TDMA transport (see lines 22-25 of column 5).

Regarding claim 3, Forte discloses the limitation that the interface is located at the user location in that the WC and PBX are preferably co-located (see lines 51-55 of column 11) and the PBX is clearly at the user location (where phones 12a and 12b are located).

Regarding claim 4, Forte discloses the limitation that the demarcation device provisionally sends the incoming phone call to the second communication channel until acceptance of the incoming phone call when one of the first and second communication channels receives the incoming phone call and the other of the first and second communication channel is disconnected from the incoming phone call (see steps 414-420 of Figure 4).

Regarding claim 8, Forte discloses the limitation that the first communication channel uses different physical transport from the second communication channel (see figure 1 which clearly shows a different interface between WC and the PBX and wireless phone).

Regarding claim 9, Forte discloses the limitation that the one or more wired phones are chosen from the group consisting of a POTS phone, a cordless phone, a WIFI TM SIP phone, and a wired SIP phone in that the analog telephone 12b is chosen from this group as it is a POTS phone.

Regarding claim 11, Forte discloses the limitation that the first and second-listed routing steps are performed, at least partially, simultaneously (see lines 46-49 of column 13).

Regarding claim 12, Forte discloses the limitation that the first-listed determining step comprises a step of detecting if the one or more wired phones have been answered (lines 59-61 of column 6); if the one or more wired phones has answered, terminate the incoming phone call to the wireless phone (lines 59-61 of column 6); if the one or more wired phones has not answered, detecting if the wireless phone has answered (lines 62-63 of column 6).

Forte does not disclose *expressly* the limitations that if the wireless phone has answered, terminate the incoming phone call to the one or more wired phones; and if the one or more wired phones has not answered and if the wireless phone has not answered, sending the incoming phone call to a voice mail system. However, Levine discloses the limitations that if the wireless phone has answered, terminate the incoming phone call to the one or more wired phones (lines 19-21 of column 6); and if the one or more wired phones has not answered and if the wireless phone has not answered, sending the incoming phone call to a voice mail system (lines 30-43 of column 8).

Forte and Levine are analogous art because they are from the same field of endeavor of simultaneously ringing alternative phone numbers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Forte to terminate all other calls when one phone answers and to transition to voice mail after a certain delay. The motivation for doing so would have been to conserve network resources; in both cases, continuing to ring an unanswered line consumes network resources unnecessarily. Therefore, it would have been obvious to combine Levine with Forte for the benefit of conserving network resources to obtain the invention as specified in claim 12.

Regarding claim 14, Forte discloses the limitation that the one or more wired phones and the wireless phone use a unified voice mailbox (see lines 64-67 of column 2).

Regarding claim 18, Forte discloses the limitation that the demarcation device wirelessly couples the one or more wired phones to a phone call transport network in lines 23-31 of column 12 which indicate that the link between the PSTN and the PBX can be wireless.

Regarding claim 19, Forte discloses the limitation that the first-listed determining step comprises a step of detecting if the one or more wired phones have been answered (see step 418 of Figure 4).

Regarding claim 20, Forte discloses the limitation that the second-listed determining step comprises a step of detecting if the wireless phone has been answered (see step 414 of Figure 4).

Regarding claim 21, Forte discloses the limitation of a computer-readable medium having computer-executable instructions for performing the computer-implementable method for integrating wireless phone service with home phone service of claim 17 in that all the limitations

of the method are disclosed as above and the passage from line 66 of column 5 through line 10 of column 6 clearly suggests that this can be implemented using software.

Regarding claim 23, Forte discloses the limitation that the one or more wired phones have been answered, stopping the routing of the incoming phone call to the wireless phone (lines 59-61 of column 6).

Regarding claim 24, the combination of Forte and Levine discloses the limitations of parent claim 20 as indicated above. However, Forte does not disclose *expressly* the limitation that if the wireless phone has been answered, stopping the routing of the incoming phone call to the one or more wired phones. However, Levine discloses the limitation that if the wireless phone has answered, stopping the routing of the incoming phone call to the one or more wired phones (lines 19-21 of column 6).

Forte and Levine are analogous art because they are from the same field of endeavor of simultaneously ringing alternative phone numbers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Forte to terminate all other calls when one phone answers. The motivation for doing so would have been to conserve network resources; in both cases, continuing to ring an unanswered line consumes network resources unnecessarily. Therefore, it would have been obvious to combine Levine with Forte for the benefit of conserving network resources to obtain the invention as specified in claim 24.

Regarding claim 25, the combination of Forte and Levine discloses the limitations of parent claim 20 as indicated above. However, Forte does not disclose *expressly* the limitation that if neither the one or more wired phones or the wireless phone has been answered, sending the incoming phone call to a unified voice mail system.

However, Levine discloses the limitation that if neither the one or more wired phones or the wireless phone has been answered, sending the incoming phone call to a unified voice mail system (lines 30-43 of column 8). Forte and Levine are analogous art because they are from they are from the same field of endeavor of simultaneously ringing alternative phone numbers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Forte to transition to voice mail after a certain delay. The motivation for doing so would have been to conserve network resources; in both cases, continuing to ring an unanswered line consumes network resources unnecessarily. Therefore, it would have been obvious to combine Levine with Forte for the benefit of conserving network resources to obtain the invention as specified in claim 25.

8. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,162,020 to Forte in view of U.S. Patent Application Publication 2003/0095569 to Wengrovitz et al and in further view of U.S. Patent 6,816,582 to Levine et al and in further view of U.S. Patent Application Publication 2004/0170268 to Hakusui.

Regarding claim 5, Forte discloses all limitations of parent claim 1 as discussed above in the rejection under 35 U.S.C. 102(e). Forte also discloses that one of the advantages of the invention is the ability to provide the features of the PBX network to the remote device (see lines 64-67 of column 2, for example.) Forte does not disclose expressly the limitations of claim 5 that the second communication channel can join the incoming phone call of the first communication channel, and the phone call can be manually transferred from the second Communication channel to the first communication channel. However, it is well known that call

transfer and conferencing are features of PBX systems. For example, Hokusui discloses this in paragraph 3 on page 1. Forte and Hokusui are analogous art because they are from the same field of endeavor of communication systems and similarly deal with simultaneously alerting multiple devices based on a single telephone number. At the time of the invention it would have been obvious to a person of ordinary skill in the art to *explicitly* include call transfer and conferencing in the features provided in the PBX of Forte and thus extended to the remote device to disclose the limitations of claim 5. The motivation for doing so would have been to allow flexibility generally provided in PBX systems to extend to the remote device as suggested by Forte in lines 61-67 of column 2. Therefore, it would have been obvious to combine Hokusui with Forte for the benefit of providing PBX features to the remote device to obtain the invention as specified in claim 5.

Regarding claim 6, Forte discloses all limitations of parent claim 1 as discussed above in the rejection under 35 U.S.C. 102(e). Forte does not disclose expressly the limitation of claim 6 that the interface is one of a wireless cellular interface, a PSTN interface and a VOIP interface. However, Hokusui discloses the limitation that the interface is one of a wireless cellular interface, a PSTN interface and a VOIP interface in the LAN interface to the virtual PBX of Figure 6. Forte and Hokusui are analogous art because they are from the same field of endeavor of communication systems and similarly deal with simultaneously alerting multiple devices based on a single telephone number. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the PBX implementation of Forte to include a LAN interface. The motivation for doing so would have been to reduce long distance charges as suggested by Hokusui in paragraph 4 on page 1. Therefore, it would have been obvious to

combine Hakusui with Forte for the benefit of reducing long distance charges to obtain the invention as specified in claim 6.

Regarding claim 7, Forte discloses the limitation that the VOIP interface is one of a wireless Internet interface, a WIFI TM interface, a power line Internet interface, an ultra-wide band wireless interface, a microwave internet interface, a cable modem interface, and a direct broadcast Satellite Internet interface in lines 23-31 of column 12 which indicate that the link between the PSTN and the PBX can be wireless. In the above combination, where the PBX is connected to a LAN using VOIP, this interface will be a wireless Internet interface which discloses the limitation that the VOIP interface is a wireless Internet interface.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT C. SCHEIBEL whose telephone number is 571-272-3169. The examiner can normally be reached on Mon-Fri from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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